

Patent claims

1. A pharmaceutical composition comprising, in admixture, a first active ingredient which is selected from a PDE4 inhibitor, a PDE3/4 inhibitor and their pharmaceutically acceptable derivatives, and a second active ingredient which is selected from a histamine receptor antagonist and its pharmaceutically acceptable derivatives.
2. A pharmaceutical composition according to claim 1, wherein the first and/or second active ingredient is in the form of a pharmaceutically acceptable salt, solvate, N-oxide or solvate of an salt or N-oxide.
3. A pharmaceutical composition according to claim 1 or 2, which is a fixed oral combination.
4. A pharmaceutical composition according to claim 1 or 2, which is a dry powder for use in a dry powder inhaler.
5. A pharmaceutical composition according to claim 1 or 2, which is an aqueous preparation for nasal administration.
6. A pharmaceutical composition according to claim 1 or 2, in which the PDE4 inhibitor, the PDE3/4 inhibitor or their pharmaceutically acceptable derivatives and the histamine receptor antagonist or its pharmaceutically acceptable derivative is combined with a propellant to form a composition which is delivered using a metered dose inhaler.
7. A pharmaceutical composition according to any of the claims 1 to 6, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], 3,5-dichloro-4-[8-methoxy-2-(trifluoromethyl)quinolin-5-ylcarboxamido]pyridine-1-oxlde [Research Code: SCH-351591], 3-[3-(cyclopentyloxy)-4-methoxybenzyl]-6-(ethylamino)-8-isopropyl-3H-purine [Research-Code: V-11294A], N-[9-methyl-4-oxo-1-phenyl-3,4,6,7-tetrahydropyrrolo[3,2,1-Jk][1,4]benzo-diazepin-3(R)-yl]pyridine-4-carboxamide [Research-Code: CI-1018], 4-(3,4-dimethoxyphenyl)thiazole-2-carboxamide oxime [Research Code: ORG-20241], 3,7-dihydro-3-(4-chlorophenyl)-1-propyl-1H-purine-2,6-dlone [INN AROFYLLINE], 3-[3-(Cyclopentyloxy)-4-methoxybenzylamino]-1H-pyrazole-4-methanol, N-(3,5-dichloro-4-pyridinyl)-2-[1-(4-fluorobenzyl)-5-hydroxy-1H-indol-3-yl]-2-oxoacetamide [Research-Code: AWD-12-281], N-(3,5-dichloropyridin-4-yl)-2-[5-fluoro-1-(4-fluorobenzyl)-1H-indol-3-yl]-2-oxoacetamide

[Research-Code: AWD-12-343], 8-Amino-1,3-bis(cyclopropylmethyl)xanthine [INN: CIPAMFYL-LINE], Tetrahydro-5-[4-methoxy-3-[(1S,2S,4R)-2-norbornyloxy]phenyl]-2(1H)-pyrimidone [INN: ATIZORAM], β -[3-(Cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1,3-dioxo-2H-Isoindole-2-propanamide [Research -Code: CDC-801], Methanesulfonic acid 2-(2,4-dichlorophenylcarbonyl)-3-ureidobenzo-furan-6-yl ester [INN: LIRIMILAST], (Z)-5-(3,5-di-tert-butyl-4-hydroxybenzylidene)-2-imidazothiazolidin-4-one [INN: DARBUFELONE], cis-[4-Cyano-4-(3-cyclopentyloxy-4-methoxy-phenyl)cyclohexane-1-carboxylic acid [INN: CILOMILAST] and the compounds with the research codes CDC-998, SH-636, D-4396, IC-485, CC-1088 and KW-4490, and the histamine receptor antagonist is selected from the group consisting of (E)-6-[(E)-3-(1-pyrrolidinyl)-1-p-tolylpropenyl]-2-pyridineacrylic acid [INN: ACRIVASTINE], 6,11-Dihydro-11-(1-methyl-4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridin [INN: AZATADINE], 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (+)-(S)-4-[4-[1-(4-chlorophenyl)-1-(2-pyridyl)methoxy]piperidin-1-yl]-butanoic acid [INN: BEPOTASTINE], (plus/minus)-[2-{4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl}ethoxy]-acetic acid [INN: CETIRIZINE], (+)-2-{2-[{(p-Chlor-alpha-methyl-alpha phenylbenzyl)oxy]ethyl}-1-methylpyrrolidin [INN: CLEMASTINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], [3-(4-Chlorophenyl)-3-pyridin-2-yl-propyl]-dimethylamine [INN: DEXCHLOR-PHENIRAMINE], 4'-tert-butyl-4-[4-(diphenylmethoxy)piperidino]butyrophenone [INN: EBASTINE], [2-{4-[bis(p-fluorophenyl)methyl]-1-piperazinyl}ethoxy]acetic acid [INN: EFLETIRIZINE], 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-benzimidazole [INN: EMEDASTINE], 3-amino-9,13b-dihydro-1H-dibenz[c,f]imidazo[1,5-a]azepine [INN: EPINASTINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)-piperidin-1-yl]propionic acid [Research Code: HSR-609], (-)-(3S,4R)-1-[cis-4-cyano-4-(p-fluorophenyl)-cyclohexyl]-3-methyl-4-phenylisonipeptic acid [INN: LEVOCABASTINE], [2-{4-[(R)-p-chloro-alpha-phenylbenzyl)-1-piperazinyl}ethoxy]-acetic acid [INN: LEVOCETIRIZINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]-pyrimidin-4(3H)-one [INN: MIZOLASTINE], 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: NORASTEMIZOLE], 3-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ylidene)-N-methyl-1-propanamine [INN: NORTRIPTYLINE], 9-methyl-3-(1H-tetrazol-5-yl)-4H-pyrido[1,2-a]-pyrimidin-4-one [INN: PEMIROLAST], 8-chloro-11-[1-(5-methylpyridin-3-ylmethyl)piperidin-4-yl-Idene]-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [INN: RUPATADINE], 1-[2-[(p-chloro-alpha-methyl-alpha phenylbenzyl)oxy]ethyl]-hexahydro-1H-azepine [INN: SETASTINE], S-(7-carboxy-4-hexyl-9-oxoxanthen-2-yl)-S-methylsulfoximine [INN: SUDEXANOX], 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE], N-benzyl-N,N'-dimethyl-N-(2-pyridyl)-ethylenediamine [INN: TRIPELENAMINE] and 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: TECASTEMIZOLE].

8. A pharmaceutical composition according to any of the claims 1 to 6, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], 3,5-dichloro-4-[8-methoxy-2-(trifluoromethyl)quinolin-5-ylcarboxamido]pyridine-1-oxide [Research Code: SCH-351591], 3-[3-(cyclopentyloxy)-4-methoxybenzyl]-6-(ethylamino)-8-isopropyl-3H-purine [Research-Code: V-11294A], N-[9-methyl-4-oxo-1-phenyl-3,4,6,7-tetrahydropyrrolo[3,2,1-jk][1,4]benzo-diazepin-3(R)-yl]pyridine-4-carboxamide [Research-Code: CI-1018], 4-(3,4-dimethoxyphenyl)thiazole-2-carboxamide oxime [Research Code: ORG-20241], 3,7-dihydro-3-(4-chlorophenyl)-1-propyl-1H-purine-2,6-dione [INN AROFYLLINE], 3-[3-(Cyclopentyloxy)-4-methoxybenzylamino]-1H-pyrazole-4-methanol, N-(3,5-dichloro-4-pyridinyl)-2-[1-(4-fluorobenzyl)-5-hydroxy-1H-indol-3-yl]-2-oxoacetamide [Research-Code: AWD-12-281], N-(3,5-dichloropyridin-4-yl)-2-[5-fluoro-1-(4-fluorobenzyl)-1H-indol-3-yl]-2-oxoacetamide [Research-Code: AWD-12-343], 8-Amino-1,3-bis(cyclopropylmethyl)xanthine [INN: CIPAM-FYLLINE], Tetrahydro-5-[4-methoxy-3-[(1S,2S,4R)-2-norbornyloxy]phenyl]-2(1H)-pyrimidone [INN: ATIZORAM], β -[3-(Cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1,3-dioxo-2H-isoindole-2-propanamide [Research -Code: CDC-801], Methanesulfonic acid 2-(2,4-dichlorophenylcarbonyl)-3-ureidobenzo-furan-6-yl ester [INN: LIRIMILAST], (Z)-5-(3,5-di-tert-butyl-4-hydroxybenzylidene)-2-imidazothiazolidin-4-one [INN: DARBUFELONE], cis-[4-Cyano-4-(3-cyclopentyloxy-4-methoxy-phenyl)cyclohexane-1-carboxylic acid [INN: CIOMILAST] and the compounds with the research codes CDC-998, SH-636, D-4396, IC-485 and CC-1088, and the histamine receptor antagonist is selected from the group consisting of (E)-6-[(E)-3-(1-pyrrolidinyl)-1-p-tolylpropenyl]-2-pyridineacrylic acid [INN: ACRIVASTINE], 6,11-Dihydro-11-(1-methyl-4-piperidyliden)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridin [INN: AZATADINE], 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (+)-(S)-4-[4-[1-(4-chlorophenyl)-1-(2-pyridyl)-methoxy]piperidin-1-yl]-butanoic acid [INN: BEPOTASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], (+)-2-{2-[(p-Chlor-alpha-methyl-alpha phenylbenzyl)oxy]ethyl}-1-methylpyrrolidin [INN: CLEMASTINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], [3-(4-Chlorophenyl)-3-pyridin-2-yl-propyl]-dimethylamine [INN: DEXCHLORPHENIRAMINE], 4'-tert-butyl-4-[4-(diphenylmethoxy)piperidino]butyrophenone [INN: EBASTINE], [2-[4-[bis(p-fluoro-phenyl)methyl]-1-piperazinyl]ethoxy]acetic acid [INN: EFLETIRIZINE], 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-benzimidazole [INN: EMEDASTINE], 3-amino-9,13b-dihydro-1H-dibenz[c,f]imidazo[1,5-a]azepine [INN: EPINASTINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)-piperidin-1-yl]propionic acid [Research Code: HSR-609], (-)-(3S,4R)-1-[cis-4-cyano-4-(p-fluorophenyl)cyclohexyl]-3-methyl-4-

phenylisonipecotic acid [INN: LEVOCABASTINE], [2-[4-[(R)-p-chloro-alpha-phenylbenzyl]-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE], 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: NORASTEMI-ZOLE], 3-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ylidene)-N-methyl-1-propanamine [INN: NORTRIPTYLINE], 9-methyl-3-(1H-tetrazol-5-yl)-4H-pyrido[1,2-a]pyrimidin-4-one [INN: PEMIRO-LAST], 8-chloro-11-[1-(5-methylpyridin-3-ylmethyl)piperidin-4-ylidene]-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [INN: RUPATADINE], 1-[2-[(p-chloro-alpha-methyl-alpha-phenylbenzyl)oxy]ethyl]hexahydro-1H-azepine [INN: SETASTINE], S-(7-carboxy-4-hexyl-9-oxoxanthan-2-yl)-S-methylsulfoximine [INN: SUDEXANOX], 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE] and N-benzyl-N,N'-dimethyl-N-(2-pyridyl)-ethylenediamine [INN: TRIPELENAMINE].

9. A pharmaceutical composition according to any of the claims 1 to 6, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST] and (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], and the histamine receptor antagonist is selected from the group consisting of 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE] and 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE].
10. A pharmaceutical composition according to claim 9, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof.
11. A pharmaceutical composition according to claim 9, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate, or N-oxide thereof, or solvate of an salt or N-oxide thereof.

12. A pharmaceutical composition according to any of the claims 1 to 6, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of
(*cis*)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1-oxo-hexahydro-1⁴-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Chloro-4-methoxyphenyl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Chloro-4-methoxyphenyl)-2-(1-oxo-hexahydro-1⁴-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3,4-Diethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aR,8aS)-(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Cyclopentyloxy-4-methoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(toluene-4-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-methanesulfonyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-2-(1-Acetyl-piperidin-4-yl)-4-(3,4-diethoxyphenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
5-(4-[(4aS,8aR)-4-(3,4-Diethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl)-5-oxo-pentanoic acid,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(1-pyridin-4-yl-methanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,
4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid phenylamide,
(*cis*)-4-[4-(7-Methoxy-2,2-dimethyl-2,3-dihydro-benzofuran-4-yl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(5-dimethylamino-naphthalene-1-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-nitro-phenyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-4-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-2-[1-[2-(4-Amino-3,5-dichloro-phenyl)-2-oxo-ethyl]-piperidin-4-yl]-4-(3,4-dimethoxyphenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

4-(3,4-Dimethoxyphenyl)-2-[1-(1-methyl-1H-pyrazolo[3,4-d]pyrimidin-4-yl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-naphthalen-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-thieno[2,3-d]pyrimidin-4-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyrimidin-2-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-oxo-2H-chromen-7-ylmethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

4-(3,4-Dimethoxyphenyl)-2-(1-isopropyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-morpholin-4-yl-2-oxo-ethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-phenethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-3-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-2-(1-pyridin-2-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(2-morpholin-4-yl-ethanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-{2-[4-(2-dimethylamino-ethyl)-piperazin-1-yl]-ethanoyl}-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-isopropyl-acetamide,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-1,2,3-thiadiazol-4-yl-benzyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

1-(1-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-methanoyl)-4-ethyl-piperazine-2,3-dione,

4-(2-{[4aS,8aR]-4-(3,4-Dimethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-ethanoylamino)-benzoic acid ethyl ester, 2-{4-[{(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-acetamide and the histamine receptor antagonist is selected from the group consisting of (E)-6-[(E)-3-(1-pyrrolidinyl)-1-p-tolylpropenyl]-2-pyridineacrylic acid [INN: ACRIVASTINE], 6,11-Dihydro-11-(1-methyl-4-piperidyliden)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridin [INN: AZATADINE], 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (+)-(S)-4-[4-[1-(4-chlorophenyl)-1-(2-pyridyl)methoxy]piperidin-1-yl]-butanoic acid [INN: BEPOTASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], (+)-2-{2-[(p-Chlor-alpha-methyl-alpha phenylbenzyl)oxy]ethyl}-1-methylpyrrolidin [INN: CLEMASTINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], [3-(4-Chlorophenyl)-3-pyridin-2-yl-propyl]-dimethylamine [INN: DEXCHLORPHENIRAMINE], 4'-tert-butyl-4-[4-(diphenylmethoxy)piperidino]butyrophenone [INN: EBASTINE], [2-[4-[bis(p-fluorophenyl)methyl]-1-piperazinyl]ethoxy]acetic acid [INN: EFLETIRIZINE], 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-benzimidazole [INN: EMEDASTINE], 3-amino-9,13b-dihydro-1H-dibenz[c,f]imidazo[1,5-a]azepine [INN: EPINASTINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)-piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)-piperidin-1-yl]propionic acid [Research Code: HSR-609], (-)-(3S,4R)-1-[cis-4-cyano-4-(p-fluorophenyl)cyclohexyl]-3-methyl-4-phenylisonipecotic acid [INN: LEVOCABASTINE], [2-[4-[(R)-p-chloro-alpha-phenylbenzyl]-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE], 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: NORSTEMIZOLE], 3-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ylidene)-N-methyl-1-propanamine [INN: NORTRIPTYLINE], 9-methyl-3-(1H-tetrazol-5-yl)-4H-pyrido[1,2-a]pyrimidin-4-one [INN: PEMIROLAST], 8-chloro-11-[1-(5-methylpyridin-3-ylmethyl)piperidin-4-ylidene]-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [INN: RUPATADINE], 1-[2-[(p-chloro-alpha-methyl-alpha phenylbenzyl)oxy]ethyl]hexahydro-1H-azepine [INN: SETASTINE], S-(7-carboxy-4-hexyl-9-oxoxanthan-2-yl)-S-methylsulfoximine [INN: SUDEXANOX], 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidy]-butanol [INN: TERFENADINE], N-benzyl-N,N'-dimethyl-N-(2-pyridyl)-ethylenediamine [INN: TRIPLELENAMINE], and 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: TECASTEMIZOLE].

13. A pharmaceutical composition according to any of the claims 1 to 6, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of (cis)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

- 65 -

(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1-oxo-hexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Chloro-4-methoxyphenyl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Chloro-4-methoxyphenyl)-2-(1-oxo-hexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3,4-Diethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aR,8aS)-(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Cyclopentyloxy-4-methoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(toluene-4-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-methanesulfonyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-2-(1-Acetyl-piperidin-4-yl)-4-(3,4-diethoxyphenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
5-{4-[(4aS,8aR)-4-(3,4-Diethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-5-oxo-pentanolc acid,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(1-pyridin-4-yl-methanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-{(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,
4-{(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid phenylamide,
(*cis*)-4-[4-(7-Methoxy-2,2-dimethyl-2,3-dihydro-benzofuran-4-yl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(5-dimethylamino-naphthalene-1-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-nitro-phenyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-4-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

- 66 -

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-2-{1-[2-(4-Amino-3,5-dichloro-phenyl)-2-oxo-ethyl]-piperidin-4-yl}-4-(3,4-dimethoxyphenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-(3,4-Dimethoxyphenyl)-2-[1-(1-methyl-1H-pyrazolo[3,4-d]pyrimidin-4-yl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-naphthalen-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-thieno[2,3-d]pyrimidin-4-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyrimidin-2-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-oxo-2H-chromen-7-ylmethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-(3,4-Dimethoxyphenyl)-2-(1-isopropyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-morpholin-4-yl-2-oxo-ethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-phenethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-3-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-2-(1-pyridin-2-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(2-morpholin-4-yl-ethanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-{2-[4-(2-dimethylamino-ethyl)-piperazin-1-yl]-ethanoyl}-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-isopropyl-acetamide,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-1,2,3-thiadiazol-4-yl-benzyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
1-(1-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-methanoyl)-4-ethyl-piperazine-2,3-dione,
4-(2-{4-[(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-ethanoylamino)-benzoic acid ethyl ester,
2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-acetamide and the histamine receptor antagonist is selected from the group consisting of 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (plus/minus)-[2-{4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl}ethoxy]-acetic acid [INN: CETIRIZINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-

[1,2-b]pyridine [INN: DESLORATADINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl) piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE] and 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE].

14. A pharmaceutical composition according to claim 9 or 13, wherein the histamine receptor antagonist is selected from the group consisting of 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], a pharmaceutically acceptable salt or solvate thereof, or a solvate of an salt thereof.
15. Use of a pharmaceutical composition according to claim 1 in the manufacture of a medicament for the treatment of a respiratory diseases.
16. A process for the preparation of a pharmaceutical composition as defined in claim 1 which comprises mixing the first active ingredient with the second active ingredient.
17. A pharmaceutical product comprising, in combination, a preparation of a first active ingredient which is selected from a PDE4 inhibitor, a PDE3/4 inhibitor and their pharmaceutically acceptable derivatives, and a preparation of a second active ingredient which is selected from a histamine receptor antagonist and its pharmaceutically acceptable derivatives, for simultaneous, sequential or separate use in therapy.
18. A pharmaceutical product according to claim 17, wherein the first and/or second active ingredient is in the form of a pharmaceutically acceptable salt, solvate, N-oxide or solvate of an salt or N-oxide.
19. A pharmaceutical product according to claim 17 or 18, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], 3,5-dichloro-4-[8-methoxy-2-(trifluoromethyl)quinolin-5-yl]carbox-amido]pyridine-1-oxide [Research Code: SCH-351591], 3-[3-(cyclopentyloxy)-4-methoxybenzyl]-6-(ethylamino)-8-isopropyl-3H-purine [Research-Code: V-11294A], N-[9-methyl-4-oxo-1-phenyl-3,4,6,7-tetrahydropyrrolo[3,2,1-jk][1,4]benzo-diazepin-3(R)-yl]pyridine-4-carboxamide [Research-Code: CI-1018], 4-(3,4-dimethoxyphenyl)thiazole-2-carboxamide oxime [Research Code: ORG-20241],

3,7-dihydro-3-(4-chlorophenyl)-1-propyl-1H-purine-2,6-dione [INN AROFYLLINE], 3-[3-(Cyclopentyloxy)-4-methoxybenzylamino]-1H-pyrazole-4-methanol, N-(3,5-dichloro-4-pyridinyl)-2-[1-(4-fluorobenzyl)-5-hydroxy-1H-indol-3-yl]-2-oxoacetamide [Research-Code: AWD-12-281], N-(3,5-dichloropyridin-4-yl)-2-[5-fluoro-1-(4-fluorobenzyl)-1H-indol-3-yl]-2-oxoacetamide [Research-Code: AWD-12-343], 8-Amino-1,3-bis(cyclopropylmethyl)xanthine [INN:CIPAMFYLLINE], Tetrahydro-5-[4-methoxy-3-[(1S,2S,4R)-2-norbornyloxy]phenyl]-2(1H)-pyrimidone [INN: ATIZORAM], β -[3-(Cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1,3-dioxo-2H-isoindole-2-propanamide [Research-Code: CDC-801], Methanesulfonic acid 2-(2,4-dichlorophenylcarbonyl)-3-ureidobenzo-furan-6-yl ester [INN: LIRIMILAST], (Z)-5-(3,5-di-tert-butyl-4-hydroxybenzylidene)-2-imidazothiazolidin-4-one [INN: DARBUFELONE], cis-[4-Cyano-4-(3-cyclopentyloxy-4-methoxyphenyl)cyclohexane-1-carboxylic acid [INN: CILOMILAST] and the compounds with the research codes CDC-998, SH-636, D-4396, IC-485, CC-1088 and KW-4490, and the histamine receptor antagonist is selected from the group consisting of (E)-6-[(E)-3-(1-pyrrolidinyl)-1-p-tolylpropenyl]-2-pyridineacrylic acid [INN: ACRIVASTINE], 6,11-Dihydro-11-(1-methyl-4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]-pyridin [INN: AZATADINE], 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (+)-(S)-4-[4-[1-(4-chlorophenyl)-1-(2-pyridyl)methoxy]-piperidin-1-yl]-butanoic acid [INN: BEPOTASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], (+)-2-[2-[(p-Chlor-alpha-methyl-alpha phenylbenzyl)oxy]ethyl]-1-methylpyrrolidin [INN: CLEMASTINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], [3-(4-Chlorophenyl)-3-pyridin-2-yl-propyl]-dimethylamine [INN: DEXCHLORPHENIRAMINE], 4'-tert-butyl-4-[4-(diphenylmethoxy)piperidino]butyrophenone [INN: EBASTINE], [2-[4-[bis(p-fluorophenyl)methyl]-1-piperazinyl]ethoxy]acetic acid [INN: EFLETIRIZINE], 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-benzimidazole [INN: EMEDASTINE], 3-amino-9,13b-dihydro-1H-dibenz[c,f]imidazo[1,5-a]azepine [INN: EPINASTINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)-piperidin-1-yl]propionic acid [Research Code: HSR-609], (-)-(3S,4R)-1-[cis-4-cyano-4-(p-fluorophenyl)cyclohexyl]-3-methyl-4-phenylisonipeptic acid [INN: LEVOCABASTINE], [2-[4-[(R)-p-chloro-alpha-phenylbenzyl]-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE], 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: NORSTEMIZOLE], 3-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ylidene)-N-methyl-1-propanamine [INN: NORTRIPTYLINE], 9-methyl-3-(1H-tetrazol-5-yl)-4H-pyrido[1,2-a]pyrimidin-4-one [INN: PEMIROLAST], 8-chloro-11-[1-(5-methylpyridin-3-ylmethyl)piperidin-4-ylidene]-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [INN: RUPATADINE], 1-[2-[(p-chloro-alpha-methyl-alpha phenylbenzyl)oxy]ethyl]hexahydro-1H-azepine [INN: SETASTINE], S-(7-carboxy-4-hexyl-9-oxo-

xanthen-2-yl)-S-methylsulfoximine [INN: SUDEXANOX], 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE], N-benzyl-N,N'-dimethyl-N-(2-pyridyl)-ethylenediamine [INN: TRIPELENAMINE] and 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: TECASTEMIZOLE].

20. A pharmaceutical product according to claim 17 or 18, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], 3,5-dichloro-4-[8-methoxy-2-(trifluoromethyl)quinolin-5-ylcarbox-amido]pyridine-1-oxide [Research Code: SCH-351591], 3-[3-(cyclopentyloxy)-4-methoxybenzyl]-6-(ethylamino)-8-isopropyl-3H-purine [Research-Code: V-11294A], N-[9-methyl-4-oxo-1-phenyl-3,4,6,7-tetrahydropyrido[3,2,1-jk][1,4]benzo-diazepin-3(R)-yl]pyridine-4-carboxamide [Research-Code: CI-1018], 4-(3,4-dimethoxyphenyl)thiazole-2-carboxamide oxime [Research Code: ORG-20241], 3,7-dihydro-3-(4-chlorophenyl)-1-propyl-1H-purine-2,6-dione [INN AROFYLLINE], 3-[3-(Cyclopentyloxy)-4-methoxybenzylamino]-1H-pyrazole-4-methanol, N-(3,5-dichloro-4-pyridinyl)-2-[1-(4-fluorobenzyl)-5-hydroxy-1H-indol-3-yl]-2-oxoacetamide [Research-Code: AWD-12-281], N-(3,5-dichloropyridin-4-yl)-2-[5-fluoro-1-(4-fluorobenzyl)-1H-indol-3-yl]-2-oxoacetamide [Research-Code: AWD-12-343], 8-Amino-1,3-bis(cyclopropylmethyl)xanthine [INN:CIPAMYLLINE], Tetrahydro-5-[4-methoxy-3-[(1S,2S,4R)-2-norbornyloxy]phenyl]-2(1H)-pyrimidone [INN: ATIZORAM], β -[3-(Cyclopentyloxy)-4-methoxyphenyl]-1,3-dihydro-1,3-dioxo-2H-isoindole-2-propanamide [Research - Code: CDC-801], Methanesulfonic acid 2-(2,4-dichlorophenylcarbonyl)-3-ureidobenzo-furan-6-yl ester [INN: LIRIMILAST], (Z)-5-(3,5-di-tert-butyl-4-hydroxybenzylidene)-2-imidazothiazolidin-4-one [INN: DARBUFELONE], cis-[4-Cyano-4-(3-cyclopentyloxy-4-methoxyphenyl)cyclohexane-1-carboxylic acid [INN: CILOMILAST] and the compounds with the research codes CDC-998, SH-636, D-4396, IC-485 and CC-1088, and the histamine receptor antagonist is selected from the group consisting of (E)-6-[(E)-3-(1-pyrrolidinyl)-1-p-tolylpropenyl]-2-pyridineacrylic acid [INN: ACRIVASTINE], 6,11-Dihydro-11-(1-methyl-4-piperidyliden)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridin [INN: AZATADINE], 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (+)-(S)-4-[4-[1-(4-chlorophenyl)-1-(2-pyridyl)methoxy]piperidin-1-yl]-butanoic acid [INN: BEPOTASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], (+)-2-{2-[(p-Chlor-alpha-methyl-alpha phenylbenzyl)oxy]ethyl}-1-methylpyrrolidin [INN: CLEMASTINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], [3-(4-Chlorophenyl)-3-pyridin-2-yl-propyl]-dimethylamine [INN: DEXCHLORPHENIRAMINE], 4'-tert-butyl-4-[4-(diphenylmethoxy)piperidino]butyrophenone [INN: EBASTINE], [2-[4-[bis(p-fluorophenyl)methyl]-1-piperazinyl]-ethoxy]acetic acid [INN: EFLETIRIZINE], 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-benzimidazole [INN: EMEDASTINE], 3-amino-9,13b-dihydro-1H-dibenz[c,f]imidazo[1,5-

a]azepine [INN: EPINASTINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)-piperidin-1-yl]propionic acid [Research Code: HSR-609], (-)-(3S,4R)-1-[cis-4-cyano-4-(p-fluorophenyl)cyclohexyl]-3-methyl-4-phenylisonipeptic acid [INN: LEVOCABASTINE], [2-[4-[(R)-p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE], 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: NORASTEMIZOLE], 3-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ylidene)-N-methyl-1-propanamine [INN: NORTRIPTYLINE], 9-methyl-3-(1H-tetrazol-5-yl)-4H-pyrido[1,2-a]pyrimidin-4-one [INN: PEMIROLAST], 8-chloro-11-[1-(5-methylpyridin-3-ylmethyl)piperidin-4-ylidene]-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [INN: RUPATADINE], 1-[2-[(p-chloro-alpha-methyl-alpha-phenylbenzyl)oxy]ethyl]hexahydro-1H-azepine [INN: SETASTINE], S-(7-carboxy-4-hexyl-9-oxoxanthen-2-yl)-S-methylsulfoximine [INN: SUDEXANOX], 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE] and N-benzyl-N,N'-dimethyl-N-(2-pyridyl)-ethylenediamine [INN: TRIPELENAMINE].

21. A pharmaceutical product according to claim 17 or 18, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST] and (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], and the histamine receptor antagonist is selected from the group consisting of 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]-pyridine [INN: DESLORATADINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE] and 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE].
22. A pharmaceutical product according to claim 21, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof.

23. A pharmaceutical product according to claim 21, wherein the PDE4 inhibitor or PDE3/4 Inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate, or N-oxide thereof, or solvate of an salt or N-oxide thereof.
24. A pharmaceutical product according to claim 17 or 18, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of (cis)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3,4-Dimethoxyphenyl)-2-(1-oxo-hexahydro-1⁴-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3-Chloro-4-methoxyphenyl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3-Chloro-4-methoxyphenyl)-2-(1-oxo-hexahydro-1⁴-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3,4-Diethoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aR,8aS)-(cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aS,8aR)-(cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3-Cyclopentyloxy-4-methoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(toluene-4-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-methanesulfonyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aS,8aR)-2-(1-Acetyl-piperidin-4-yl)-4-(3,4-diethoxyphenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, 5-{(4aS,8aR)-4-(3,4-Diethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-5-oxo-pentanoic acid, (4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(1-pyridin-4-yl-methanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, 4-{(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,

4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid phenylamide,

(*cis*)-4-[4-(7-Methoxy-2,2-dimethyl-2,3-dihydro-benzofuran-4-yl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(5-dimethylamino-naphthalene-1-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-nitro-phenyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-4-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-2-{1-[2-(4-Amino-3,5-dichloro-phenyl)-2-oxo-ethyl]-piperidin-4-yl}-4-(3,4-dimethoxy-phenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

4-(3,4-Dimethoxyphenyl)-2-[1-(1-methyl-1H-pyrazolo[3,4-d]pyrimidin-4-yl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-naphthalen-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-thieno[2,3-d]pyrimidin-4-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyrimidin-2-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-oxo-2H-chromen-7-ylmethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

4-(3,4-Dimethoxyphenyl)-2-(1-isopropyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-morpholin-4-yl-2-oxo-ethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-phenethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-3-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-2-(1-pyridin-2-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(2-morpholin-4-yl-ethanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-{2-[4-(2-dimethylamino-ethyl)-piperazin-1-yl]-ethanoyl}-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-isopropyl-acetamide,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-1,2,3-thiadiazol-4-yl-benzyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
 1-(1-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-methanoyl)-4-ethyl-piperazine-2,3-dione,
 4-(2-{4-[(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-ethanoylamino)-benzoic acid ethyl ester,
 2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-acetamide and the histamine receptor antagonist is selected from the group consisting of (E)-6-[(E)-3-(1-pyrrolidinyl)-1-p-tolylpropenyl]-2-pyridineacrylic acid [INN: ACRIVASTINE], 6,11-Dihydro-11-(1-methyl-4-piperidyliden)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridin [INN: AZATADINE], 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (+)-(S)-4-[4-[1-(4-chlorophenyl)-1-(2-pyridyl)methoxy]piperidin-1-yl]-butanoic acid [INN: BEPOTASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], (+)-2-{2-[(p-Chlor-alpha-methyl-alpha phenylbenzyl)oxy]-ethyl}-1-methylpyrrolidin [INN: CLEMASTINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], [3-(4-Chlorophenyl)-3-pyridin-2-yl-propyl]-dimethylamine [INN: DEXCHLORPHENIRAMINE], 4'-tert-butyl-4-[4-(diphenylmethoxy)piperidino]butyrophenone [INN: EBASTINE], [2-[4-[bis(p-fluorophenyl)methyl]-1-piperazinyl]ethoxy]-acetic acid [INN: EFLETIRIZINE], 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-benzimidazole [INN: EMEDASTINE], 3-amino-9,13b-dihydro-1H-dibenz[c,f]imidazo[1,5-a]azepine [INN: EPINASTINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)-piperidin-1-yl]propionic acid [Research Code: HSR-609], (-)-(3S,4R)-1-[cis-4-cyano-4-(p-fluorophenyl)cyclohexyl]-3-methyl-4-phenylisonipeptic acid [INN: LEVOCABASTINE], [2-[4-[(R)-p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE], 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: NORASTEMIZOLE], 3-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ylidene)-N-methyl-1-propanamine [INN: NORTRIPTYLINE], 9-methyl-3-(1H-tetrazol-5-yl)-4H-pyrido[1,2-a]pyrimidin-4-one [INN: PEMIROLAST], 8-chloro-11-[1-(5-methylpyridin-3-yl-methyl)piperidin-4-ylidene]-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [INN: RUPATADINE], 1-[2-[(p-chloro-alpha-methyl-alpha phenylbenzyl)oxy]ethyl]-hexahydro-1H-azepine [INN: SETASTINE], S-(7-carboxy-4-hexyl-9-oxoxanthen-2-yl)-S-methylsulfoximine [INN: SUDEXANOX], 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE], N-benzyl-N,N'-dimethyl-N-(2-pyridyl)-ethylenediamine [INN: TRIPELENAMINE], and 1-(4-fluorobenzyl)-2-(piperidin-4-ylamino)-1H-benzimidazole [INN: TECASTEMIZOLE].

25. A pharmaceutical product according to claim 17 or 18, wherein the PDE4 inhibitor or PDE3/4 Inhibitor is selected from the group consisting of (cis)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxyben-

- 74 -

zofuran-4-yl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(cis)-4-(3,4-Dimethoxyphenyl)-2-(1-oxo-hexahydro-1⁴-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(cis)-4-(3-Chloro-4-methoxyphenyl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(cis)-4-(3-Chloro-4-methoxyphenyl)-2-(1-oxo-hexahydro-1⁴-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(cis)-4-(3,4-Diethoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(cis)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aR,8aS)-(cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-(cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(cis)-4-(3-Cyclopentyloxy-4-methoxyphenyl)-2-(1,1-dioxohexahydro-1⁶-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(toluene-4-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-methanesulfonyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-2-(1-Acetyl-piperidin-4-yl)-4-(3,4-diethoxyphenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
5-{4-[(4aS,8aR)-4-(3,4-Diethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-5-oxo-pentanoic acid,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(1-pyridin-4-yl-methanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,
4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid phenylamide,
(cis)-4-[4-(7-Methoxy-2,2-dimethyl-2,3-dihydro-benzofuran-4-yl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(5-dimethylamino-naphthalene-1-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-nitro-phenyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

- 75 -

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-4-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-2-{1-[2-(4-Amino-3,5-dichloro-phenyl)-2-oxo-ethyl]-piperidin-4-yl}-4-(3,4-dimethoxy-phenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-(3,4-Dimethoxyphenyl)-2-[1-(1-methyl-1H-pyrazolo[3,4-d]pyrimidin-4-yl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-naphthalen-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-thieno[2,3-d]pyrimidin-4-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyrimidin-2-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-oxo-2H-chromen-7-ylmethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-(3,4-Dimethoxyphenyl)-2-(1-isopropyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-morpholin-4-yl-2-oxo-ethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-phenethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-3-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-2-(1-pyridin-2-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(2-morpholin-4-yl-ethanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-{2-[4-(2-dimethylamino-ethyl)-piperazin-1-yl]-ethanoyl}-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-isopropyl-acetamide,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-1,2,3-thiadiazol-4-yl-benzyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
1-(1-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-methanoyl)-4-ethyl-piperazine-2,3-dione,
4-(2-{4-[(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-ethanoylamino)-benzolic acid ethyl ester,
2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-acetamide and the histamine receptor antagonist is selected from the group consisting of 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone

[INN: AZELASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE] and 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE].

26. A pharmaceutical product according to claim 21 or 25, the histamine receptor antagonist is selected from the group consisting of 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], a pharmaceutically acceptable salt or solvate thereof, or a solvate of an salt thereof.
27. Use of a pharmaceutical product according to claim 19 or 24 in the manufacture of a medicament for the treatment of respiratory diseases.
28. A kit comprising a preparation of a first active ingredient which is selected from a PDE4 inhibitor, a PDE3/4 inhibitor and their pharmaceutically acceptable derivatives, a preparation of a second active ingredient which is selected from a histamine receptor antagonist and its pharmaceutically acceptable derivatives, and instructions for simultaneous, sequential or separate administration to the patient in need thereof.
29. A kit according to claim 28, wherein the first and/or second active ingredient is in the form of a pharmaceutically acceptable salt, solvate, N-oxide or solvate of an salt or N-oxide.
30. A kit according to claim 28 or 29, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST] and (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], and the histamine receptor antagonist is selected from the group consisting of 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-

fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE] and 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE].

31. A kit according to claim 30, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof.
32. A kit according to claim 30, wherein the PDE4 Inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof.
33. A kit according to claim 28 or 29, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of (cis)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3,4-Dimethoxyphenyl)-2-(1-oxo-hexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3-Chloro-4-methoxyphenyl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3-Chloro-4-methoxyphenyl)-2-(1-oxo-hexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3,4-Diethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aR,8aS)-(cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aS,8aR)-(cis)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (cis)-4-(3-Cyclopentyloxy-4-methoxyphenyl)-2-(1,1-dioxohexahydro-1^b-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(toluene-4-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-methanesulfonyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one, (4aS,8aR)-2-(1-Acetyl-piperidin-4-yl)-4-(3,4-diethoxyphenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

5-{4-[(4aS,8aR)-4-(3,4-Diethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-5-oxo-pentanoic acid,

(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(1-pyridin-4-yl-methanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,

4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid phenylamide,

(*cis*)-4-[4-(7-Methoxy-2,2-dimethyl-2,3-dihydro-benzofuran-4-yl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(5-dimethylamino-naphthalene-1-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-nitro-phenyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-4-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-2-{1-[2-(4-Amino-3,5-dichloro-phenyl)-2-oxo-ethyl]-piperidin-4-yl}-4-(3,4-dimethoxy-phenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

4-(3,4-Dimethoxyphenyl)-2-[1-(1-methyl-1H-pyrazolo[3,4-d]pyrimidin-4-yl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-naphthalen-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-thieno[2,3-d]pyrimidin-4-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyrimidin-2-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-oxo-2H-chromen-7-ylmethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

4-(3,4-Dimethoxyphenyl)-2-(1-isopropyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-morpholin-4-yl-2-oxo-ethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-phenethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-3-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-2-(1-pyridin-2-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

- 79 -

(4aS;8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(2-morpholin-4-yl-ethanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-{2-[4-(2-dimethylamino-ethyl)-piperazin-1-yl]-ethanoyl}-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-isopropyl-acetamide,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-1,2,3-thiadiazol-4-yl-benzyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
1-(1-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-methanoyl)-4-ethyl-piperazine-2,3-dione,
4-(2-{4-[(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-ethanoylamino)-benzoic acid ethyl ester,
2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-acetamide and the histamine receptor antagonist is selected from the group consisting of 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [INN: DESLORATADINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE] and 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE].

34. A kit according to claim 30 or 33, wherein the histamine receptor antagonist is selected from the group consisting of 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [INN: DESLORATADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], a pharmaceutically acceptable salt or solvate thereof, or a solvate of an salt thereof.
35. A method for the treatment of a respiratory disease comprising administering to a patient in need thereof (a) an effective amount of a PDE4 inhibitor, a PDE3/4 inhibitor or a pharmaceutically acceptable derivative thereof and (b) an effective amount of a histamine receptor antagonist or a pharmaceutically acceptable derivative thereof.
36. A method according to claim 35, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST] and (-)-cis-9-ethoxy-8-methoxy-2-methyl-1,2,3,4,4a,10b-hexahydro-6-(4-diisopropylaminocarbonylphenyl)-benzo-[c][1,6]naphthyridine [INN: PUMAFENTRINE].

37. A method according to claim 35, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of
(*cis*)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1*H*-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1-oxo-hexahydro-1*H*-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Chloro-4-methoxyphenyl)-2-(tetrahydrothiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Chloro-4-methoxyphenyl)-2-(1-oxo-hexahydro-1*H*-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3,4-Diethoxyphenyl)-2-(1,1-dioxohexahydro-1*H*-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(2,3-Dihydro-2,2-dimethyl-7-methoxybenzofuran-4-yl)-2-(1,1-dioxohexahydro-1*H*-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aR,8aS)-(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1*H*-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-(*cis*)-4-(3,4-Dimethoxyphenyl)-2-(1,1-dioxohexahydro-1*H*-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(*cis*)-4-(3-Cyclopentyloxy-4-methoxyphenyl)-2-(1,1-dioxohexahydro-1*H*-thiopyran-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(toluene-4-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-methanesulfonyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-2-(1-Acetyl-piperidin-4-yl)-4-(3,4-diethoxyphenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
5-{4-[(4aS,8aR)-4-(3,4-Diethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1*H*-phthalazin-2-yl]-piperidin-1-yl}-5-oxo-pentanoic acid,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(1-pyridin-4-yl-methanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1*H*-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,
4-[(4aS,8aR)-4-(3,4-Diethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1*H*-phthalazin-2-yl]-piperidine-1-carboxylic acid phenylamide,
(*cis*)-4-[4-(7-Methoxy-2,2-dimethyl-2,3-dihydro-benzofuran-4-yl)-1-oxo-4a,5,8,8a-tetrahydro-1*H*-phthalazin-2-yl]-piperidine-1-carboxylic acid tert-butylamide,

- 81 -

(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(5-dimethylamino-naphthalene-1-sulfonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-nitro-phenyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-4-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-2-{1-[2-(4-Amino-3,5-dichloro-phenyl)-2-oxo-ethyl]-piperidin-4-yl}-4-(3,4-dimethoxy-phenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-(3,4-Dimethoxyphenyl)-2-[1-(1-methyl-1H-pyrazolo[3,4-d]pyrimidin-4-yl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-naphthalen-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-thieno[2,3-d]pyrimidin-4-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyrimidin-2-yl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-oxo-2H-chromen-7-ylmethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
4-(3,4-Dimethoxyphenyl)-2-(1-isopropyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(2-morpholin-4-yl-2-oxo-ethyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-phenethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(morpholine-4-carbonyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-(1-pyridin-3-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-2-(1-pyridin-2-ylmethyl-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-[1-(2-morpholin-4-yl-ethanoyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
(4aS,8aR)-4-(3,4-Diethoxyphenyl)-2-(1-{2-[4-(2-dimethylamino-ethyl)-piperazin-1-yl]-ethanoyl}-piperidin-4-yl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-2H-isopropyl-acetamide,
(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-2-[1-(4-1,2,3-thiadiazol-4-yl-benzyl)-piperidin-4-yl]-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,
1-(1-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-piperidin-1-yl}-methanoyl)-4-ethyl-piperazine-2,3-dione,

4-(2-{4-[(4aS,8aR)-4-(3,4-Dimethoxy-phenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-pi-peridin-1-yl}-ethanoylamino)-benzoic acid ethyl ester and
2-{4-[(4aS,8aR)-4-(3,4-Dimethoxyphenyl)-1-oxo-4a,5,8,8a-tetrahydro-1H-phthalazin-2-yl]-pi-peridin-1-yl}-2H-acetamide.

38. A method according to any of claims 35 to 37, wherein the histamine receptor antagonist is selected from the group consisting of 4-[(4-chlorophenyl)methyl]-2-(hexahydro-1-methyl-1H-azepin-4-yl)-1(2H)phthalazinone [INN: AZELASTINE], (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE], 8-chloro-6,11-dihydro-11-(4-piperidylidene)-5H-benzo[5,6]cyclohepta-[1,2-b]pyridine [INN: DESLORATADINE], (plus/minus)-p-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)piperidino]-butyl]-alpha-methylhydratropic acid [INN: FEXOFENADINE], ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate [INN: LORATADINE], 2-[N-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-N-methyl-amino]pyrimidin-4(3H)-one [INN: MIZOLASTINE] and 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]-butanol [INN: TERFENADINE].
39. A pharmaceutical composition according to any of the claims 1 to 7, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof, and the histamine receptor antagonist is selected from the group consisting of [2-[4-[(R)-p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE] and its pharmaceutically acceptable derivatives.
40. A pharmaceutical product according to any of the claims 17 to 19, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof, and the histamine receptor antagonist is selected from the group consisting of [2-[4-[(R)-p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE] and its pharmaceutically acceptable derivatives.
41. A pharmaceutical composition according to claim 9, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof, and the histamine receptor antagonist is selected from the group consisting of (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE] and its pharmaceutically acceptable derivatives.

42. A pharmaceutical product according to claim 21, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof, and the histamine receptor antagonist is selected from the group consisting of (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE] and its pharmaceutically acceptable derivatives.
43. Use of a pharmaceutical composition/product according to any of the claims 39 to 42 in the manufacture of a medicament for the treatment of respiratory diseases.
44. A kit according to claim 28 or 29, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof, and the histamine receptor antagonist is selected from the group consisting of [2-[4-[(R)-p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE] and its pharmaceutically acceptable derivatives.
45. A kit according to claim 30, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof, and the histamine receptor antagonist is selected from the group consisting of (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE] and its pharmaceutically acceptable derivatives.
46. A method according to claim 35, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof, and the histamine receptor antagonist is selected from the group consisting of [2-[4-[(R)-p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: LEVOCETIRIZINE] and its pharmaceutically acceptable derivatives.
47. A method according to claim 35, wherein the PDE4 inhibitor or PDE3/4 inhibitor is selected from the group consisting of 3-Cyclopropylmethoxy-4-difluoromethoxy-N-(3,5-dichloropyrid-4-yl)-benzamide [INN: ROFLUMILAST], a pharmaceutically acceptable salt, solvate or N-oxide thereof, or solvate of an salt or N-oxide thereof, and the histamine receptor antagonist is selected from the group consisting of (plus/minus)-[2-[4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl]ethoxy]-acetic acid [INN: CETIRIZINE] and its pharmaceutically acceptable derivatives.